

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference ALL.07/PCT	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US05/13708	International filing date (day/month/year) 22 April 2005 (22.04.2005)	(Earliest) Priority Date (day/month/year) 22 April 2004 (22.04.2004)
Applicant ALLOS THERAPEUTICS, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the Report**
 - a. With regard to the language, the international search was carried out on the basis of:
 - the international application in the language in which it was filed.
 - a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))
 - b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.
 2. Certain claims were found unsearchable (See Box No. II)
 3. Unity of invention is lacking (See Box No. III)
 4. With regard to the title,
 - the text is approved as submitted by the applicant.
 - the text has been established by this Authority to read as follows:
5. With regard to the abstract,
 - the text is approved as submitted by the applicant.
 - the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
6. With regard to the drawings,
 - a. the figure of the drawings to be published with the abstract is Figure No. _____
 - as suggested by the applicant.
 - as selected by this Authority, because the applicant failed to suggest a figure.
 - as selected by this Authority, because this figure better characterizes the invention.
 - b. none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/13708

A. CLASSIFICATION OF SUBJECT MATTER

IPC: A61K 31/195(2006.01),33/00(2006.01);A61N 5/00(2006.01);A61P 35/04(2006.01)

USPC: 514/563;424/600;600/1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 514/563; 424/600; 600/1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	STEFFEN, R.P. et al. Allosteric Modification of Hemoglobin by RSR13 as a Therapeutic Strategy. Advances in Experimental Medicine and Biology. 2003, Vol. 530, pages 249-259, see in particular page 251, first full paragraph & Fig. 2; see also page 252, second full paragraph.	1-11
Y	KAVANAGH, B.D. et al. A Phase I Study of RSR13, A radiation-enhancing hemoglobin modifier: tolerance of repeated intravenous doses and correlation of pharmacokinetics with pharmacodynamics. Int. J. Radiation Oncology Biology Physics. 2001, Vol. 49, No. 4, pages 1133-1139, see in particular page 1134, right column, first paragraph.	1-11
Y	TEICHER B.A. et al. RSR13: Effects on tumor oxygenation and response to therapy. Drug Development Research. 1996, Vol. 38, pages 1-11.	1-11
Y	CHANG, E.L. et al. Diagnosis and Management of Central Nervous System Metastases from Breast Cancer. The Oncologist. 2003, Vol. 8, pages 398-410.	1-11

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search
29 June 2006 (29.06.2006)

Date of mailing of the international search report

20 JUL 2006

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

JOHN PAK

Telephone No. (571) 272-1600

J. Roberts Jr.

INTERNATIONAL SEARCH REPORT

International application No. PCT/US05/13708

Continuation of B. FIELDS SEARCHED Item 3:

STN ONLINE, Files HCPLUS, WPIDS, MEDLINE. Search Terms: efaproxiral, cancer?, neoplas?, anticancer?, antineoplas?, tumor?, antitumor?, tumour?, antitumour?, metasta?, central nervous system, cns, brain#, cranial nerve#, leptomeninges, spinal cord#, eye#, radiation, irradiat?, wbrt, oxygen?